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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,117	12/02/2003	Hanns-Joerg Mauk	0324	3331
112	7590	11/01/2004	EXAMINER	
ARMSTRONG WORLD INDUSTRIES, INC. LEGAL DEPARTMENT P. O. BOX 3001 LANCASTER, PA 17604-3001			SIMONE, CATHERINE A	
			ART UNIT	PAPER NUMBER
			1772	

DATE MAILED: 11/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/725,117	MAUK ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Catherine Simone	1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-5 and 7-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-5 and 7-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. ____.  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>4/23/04</u> .   | 6) <input type="checkbox"/> Other: ____.                                    |

## DETAILED ACTION

### *Priority*

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Germany on May 29, 2001. It is noted, however, that applicant has not filed a certified copy of the 101 26 122.5-26 application as required by 35 U.S.C. 119(b).

### *Oath/Declaration*

2. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It does not identify the foreign application for patent or inventor's certificate on which priority is claimed pursuant to 37 CFR 1.55, and any foreign application having a filing date before that of the application on which priority is claimed, by specifying the application number, country, day, month and year of its filing.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. **Claims 1, 3-5, 7-12, 14, 15 and 24** are rejected under 35 U.S.C. 102(b) as being anticipated by Kupits (3,129,194).

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Regarding **claims 1, 5, 7, 8, 11 and 24**, Kupits discloses a floor covering comprising a composition including polyvinyl chloride (PVC) (see col. 3, line 11 and lines 73-74), a plasticizer in an amount of at least about 12 wt% based on PVC (see col. 4, lines 61-70) and a substance capable of migration within the PVC (see col. 5, line 48 to col. 6, line 17), the amount of the substance capable of migration being in excess of its compatibility in the PVC; wherein the PVC inherently has a K-value from about 40 to about 80, since the PVC is a low molecular weight PVC (see col. 3, lines 73-74); wherein the substance capable of migration is a wax-like substance selected from the group consisting of a partially synthetic wax, a fully synthetic wax, a natural synthetic wax, a modified natural wax and mixtures thereof (see col. 5, line 48 to col. 6, line 10); and wherein the substance capable of migration is present in an amount from about 1.5 wt% to about 15 wt% based on the total amount of the PVC (see col. 6, lines 14-17). Regarding **claim 3**, note the floor covering is homogeneous (see col. 10, lines 13-15). Regarding **claim 4**, note the floor covering is multi-layered (see col. 7, lines 17-21). Regarding **claim 9**, note the wax-like substance comprises a plurality of wax-like substances, the wax-like substances having different melting points (see col. 5, line 44 to col. 6, line 10). Regarding **claim 10**, note the wax-like substance comprises an amide wax (see col. 5, line 68). Regarding **claims 12, 14 and 15**, note a substrate substantially free of the substance capable of migration and comprising PVC (see col. 7, lines 17-21 and line 44) and a coating, the coating comprising PVC (see col. 3, line 11), plasticizer (see col. 4, lines 61-65) and substance capable of migration in an amount from about 1.5 wt% to about 6 wt% based on the PVC of the coating (see col. 6, lines 12-17).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 13, 16, 19-23 and 25** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kupits (3,129,194) in view of Hiragami et al. (4,501,783).

Kupits discloses the presently claimed invention as shown above. However, Kupits fails to disclose the PVC coating having a thickness of about 10  $\mu\text{m}$  to about 100  $\mu\text{m}$ , a polymeric particulate material having a hardness greater than the hardness of the PVC and present in an amount from about 1 wt% to about 20 wt% based on the total amount of PVC material, wherein the particles of the particulate material have a largest diameter from about 2  $\mu\text{m}$  to about 100  $\mu\text{m}$  and wherein a plurality of the particles of the particulate material protrude above the surface of the PVC. Hiragami et al. teaches that it is old and well-known in the art to have a PVC composition coating having a thickness of about 10  $\mu\text{m}$  to about 100  $\mu\text{m}$  (see col. 6, line 48) and a polymeric particulate material in the PVC composition (see col. 3, lines 6-9) having a hardness greater than the hardness of the PVC and present in an amount from about 1 wt% to about 20 wt% based on the total amount of PVC material (see col. 2, lines 53-58), wherein the particles of the particulate material have a largest diameter from about 2  $\mu\text{m}$  to about 100  $\mu\text{m}$  (see col. 2, lines 45-46) and wherein a plurality of the particles of the particulate material protrude above the surface of the PVC (Fig. 1, #2'; also see col. 3, lines 6-9) for the purpose of producing a resilient PVC floor covering with improved wear and abrasion resistance. Therefore, it would have been

obvious to one of ordinary skill in the art at the time the applicant's invention was made to have modified the PVC composition in Kupits to have a thickness of about 10  $\mu\text{m}$  to about 100  $\mu\text{m}$  and consist of a polymeric particulate material having a hardness greater than the hardness of the PVC and present in an amount from about 1 wt% to about 20 wt% based on the total amount of PVC material, wherein the particles of the particulate material have a largest diameter from about 2  $\mu\text{m}$  to about 100  $\mu\text{m}$  and wherein a plurality of the particles of the particulate material protrude above the surface of the PVC as suggested by Hiragami et al. in order to produce a resilient PVC floor covering with improved wear and abrasion resistance.

7. **Claims 17 and 18** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kupits (3,129,194) in view of Dees et al. (4,816,319).

Kupits discloses the claimed present invention as shown above. However, Kupits fails to disclose the floor covering having a profile with elevations and recesses, wherein the average spacing between profile peaks in the centerline is more than about 200  $\mu\text{m}$  and less than about 1000  $\mu\text{m}$  and the difference in height between the elevations and the recesses is from about 20  $\mu\text{m}$  to about 200  $\mu\text{m}$ . Dees et al. teaches that it is old and well-known in the art to have a PVC floor covering having a profile with elevations and recesses for the purpose of producing a resilient floor covering with increased wear and slip resistance. Therefore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have modified the PVC floor covering of Kupits to have a profile with elevations and recesses as suggested by Dees et al. in order to produce a resilient floor covering with increased wear and slip resistance. Furthermore, it would have been obvious to one of ordinary skill in the art at the time the applicant's invention was made to have modified the profile of elevations and recesses

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in Dees et al. to where the average spacing between profile peaks in the centerline is more than about 200  $\mu\text{m}$  and less than about 1000  $\mu\text{m}$  and the difference in height between the elevations and the recesses is from about 20  $\mu\text{m}$  to about 200  $\mu\text{m}$ , since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art in absence of showing unexpected results. *MPEP* 2144.05 (II).

***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Catherine Simone whose telephone number is (571)272-1501. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on (571) 272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Catherine Simone  
Examiner  
Art Unit 1772  
October 29, 2004



**DONALD J. LONEY**  
**PRIMARY EXAMINER**